

**RANDOM ACCESS MEMORY  
HAVING SELF-ADJUSTING OFF-CHIP DRIVER**

**Abstract**

One embodiment of the present invention provides a random access memory device including a memory array, a level detector, and an off-chip driver circuit. The level detector monitors a source voltage and provides a level signal representative of a voltage range of the source voltage. The off-chip driver circuit is associated with the memory array and provides an output signal having at least one operating parameter, and adjusts the at least one operating parameter by adjusting a magnitude of at least one impedance based on the level signal.